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AUTHOR Muldner, Carl; Murphy, Francis
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ABSTRACT

Documents providing background and information about the plans of the Owego Apalachin Central School District (New York) for instructional technology are presented. An outline of the technology plan emphasizes key components, the planning process, and details about instructional and administrative computing. The current uses of electronic technology in the schools are summarized, reviewing instructional computing and administrative uses in student recordkeeping and instructional and business management. Future directions are also summarized. "A Note to Parents" introduces the comprehensive plans for school computer use to parents, explaining the district's emphasis on integrating computer use into regular instruction and including a brief review of the curriculum as it exists. Possible long-term goals are summarized in an attachment. A separate section lists assumptions on which future long-term plans are based. A description of the academic design model on which planning rests is included, with an overview of the planned distributed computer network. (SLD)

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OWEGO APALACHIN CENTRAL SCHOOL DISTRICT

Comprehensive Long Range Plan For Instructional Technology

36 Talcott St.
Owego, NY 13827

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THE TECHNOLOGY PLAN

I. **The Importance of Having a Plan**

II. **The Key Components:**
- A. The Community
- B. The Faculty
- C. Administrative Leadership

III. **Owego Apalachin's Process**
- A. The Academic Design Model
- B. Computer Education Committee
- C. First Long Range Plan for Instructional Technology - A curriculum for ALL students.
- D. The Second Long Range Plan - Making Technology Accessible and Integrating it into Instruction
- E. EAP and the Three to Five Year Plan

IV. **Packet Contents:**
- A. Overview of Current Instructional and Administrative Computing
- B. A Note to Parents and Curriculum Overview created as part of our First Long Range Plan
- C. Possible Long Term Goals that led to Second Long Range Plan for Technology
- D. Computer Education Plans - Goals and the Basic Assumptions
- E. Academic Design Model - an overview of our planning process
- F. Summary of Computer Related Building Projects for our Second Long Range Plan

Owego Apalachin Central School District
Computer Services Department

INSTRUCTIONAL COMPUTING

Five Instructional LANS supporting instruction

1. A distributed classroom network in OAMS including over 25 workstations.
2. IBM IClass Labs of 30 units each in OES and AES featuring voice synthesis and a library of instructional software.
3. Apple Talk Network supporting Apple IIe computers featuring Apple Works in the OAMS computer lab.
4. Data General PCI Lab MV 3500 mini computer 10 networked microcomputers connecting teachers to CEO net work and to the larger statewide TNT network.

Note: during the 1992-93 school year model classrooms were connected to the instructional networks in each of the buildings.

Software Correlation K-5

A correlation of instructional software developed by Owego Apalachin teachers. This correlation assists teachers in the meaningful integration of software and classroom instructional objectives. We plan to renew and update the correlation during the summer of 1993.

Integrated K-12 Computer Correlation

A comprehensive curriculum developed under the ADM process including minimum competencies for all students. The subjects include: keyboarding, word processing, programming, data bases, spreadsheets, telecommunications, and on-line electronic research.

Computer Electives including: Computer Applications, Drafting, BC/BCA, Basic I, Basic II, Pascal I, AP Pascal, Computer Graphics, Electronic Information Processing are available to the students in our high school.

The Computer Committee will be studying the K-12 curriculum during the next year. Recommendations for revision are likely.

Distance Learning Classroom

The Distance Learning Classroom is in its third year of operation. The addition of a KU/C Band Satellite Dish and receiver which can send signals out to all of the Distance Learning classrooms has greatly enhanced our capabilities. We now have the ability to broadcast programming out over Simmons Cable company system.

As part of the Tioga County Coalition for Better Schools, the Owego Free Academy has used satellite dish technology to shrink the world. The activities of Robert Ballard's research project in the Gallapagos along with the activities of OFA teacher Linda Gretz have been broadcast directly to OFA, OAMS, Tioga Center, and Newark Valley.

Testing of Model Classroom

The district has committed significant resources to the creation of a model classroom in each of the buildings. We have done so to test the assumptions of our Long Term Plan for Instructional Technology. The classroom features equipment networked computer workstations, a library of software, printers, speech units and other devices. The participating teachers have been trained in the use of the instructional networks, and the integration of software into their curriculum.

Bell Atlantic Multimedia Grant

During the summer of 1992 the Bell Atlantic Corporation awarded the Owego Apalachin Central School District a grant of $10,000 in order to further experiment with the development of multimedia by students. The project, headed by teachers Bill Anderson and Tom Larson, led to a state-of-the-art production including com-

puter graphics, text, audio, video and digitized images.

IBM Multimedia

A simple to use multimedia program, Linkway, was installed on each of the elementary and middle school networks. A core of teachers and librarians were trained in this authoring program.

Library of Lasermedia Resources

An extensive library of laserdisc science discs were established at AES, OAMS, and OFA this year. Teachers from each of these buildings were trained in the use of laserdisc materials and the integration of these resources into their curriculum. A number of teachers from AES were awarded a grant to experiment with the integration of Optical Data's Windows on Science with the First and Second Grade Language Arts curriculum.

Library Automation

The Owego Free Academy Library is now connected to the Cobit library system. This system tracks the collections of most of the public school libraries in our Region. Students and teachers can call up our collection of books, magazines, and audio visual on one of three terminals in the library.
The automation of OFA is the first stage of a four stage process which will ultimately connect all of our school libraries. The Owego Apalachin District is piloting an innovative system that will allow us to provide access to the library system on any networked computer in the district.

Integration of Computers and Primary Language Arts

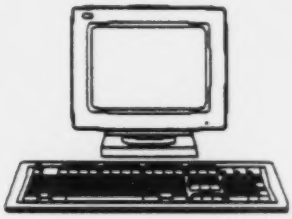
IBM's innovative reading program Stories and More has been installed in both of our elementary computer networks. This program, which is carefully integrated within our Whole Language Approach to reading, features colorful graphics, speech synthesis, and a collection of `trade books.'

The primary teachers of both OES and AES have been trained in the use of this program.

Connection to the Internet

The Owego Apalachin district is about ready to begin a pilot of an international computer network known as the Internet. Access to this network will allow our students to access public data bases on computer throughout the world, to send mail, and to join informational conferences. Our long term plan calls for access to this type of international communication.

ADMINISTRATIVE



COMPUTING, STUDENT APPLICATIONS

Integrated Student and Family Data Base

The district has developed a central student and family data base system. These data bases are updated from our student census system. They provide the core demographic data for almost all of the student applications developed for the district.

Extended Data Base

During the 1992-93 school year a new extended data base is being developed to supplement our Integrated Student and Family systems. This data base will include information regularly needed in the buildings and will reduce duplication of data entry. Information in this system will allow us to better track critical student data (e.g. retention, legal restrictions, health alerts, etc.)

Building Based Data Access

It is our belief that instructional data should be placed in the hands of those who need it most. A new system of information has been developed and placed at the disposal of the principals,

guidance counselors, and building secretaries. This system provides fast and easy access to classlists, birthday lists, grading, family and demographic information. It is password protected, access is limited to authorized personnel.

Health Information System

Another new service provided during the 1992-93 school year is an integrated health information system. The system is currently being piloted at OES. It will track critical student information, immunization records, and incident reports. When fully implemented this system will provide a much more efficient means of tracking student health records.

Development of Portfolio Data Base

As part of the EAP 3-5 Year Plan, we are committed to developing a date base that will allow us to track significant ``checkpoints'' of our Standards of Excellence. As part of this process a model relational data base has been developed and reviewed by the Portfolio Committee. This data base will be used in the future to track student and district progress on our Standards of Excellence.

Period by Period Attendance

A specially designed system that tracks student absences at the Owego Free Academy. The system is customized to meet the needs of the OFA attendance jeopardy system.

During the spring of 1993 we will be testing a bar coded approach to data collection that should increase the efficiency of our period by period system.

Athletic/Sports Sub-system

A system designed to track participation in the athletic program. It maintains student records, participation information, awards, and other critical information.

SUNPAC Student Applications System

The Owego Apalachin district has taken on a major distributed computing process. We now do all of the following student applications in-house. The software provides us with better and more comprehensive records, more local control, access to longitudinal data, and a significant financial savings.

Student Census
Daily Attendance
Student Scheduling - OFA
Mark Reporting - OAMS, OFA
Multi-year Transcript

Honor Roll Sub-system - OAMS

A custom application that allows the middle school to send out personalized letters to all honor roll recipients.

Student Discipline System K-12

Developed during the summer of 1992, this application allows the principal to keep useful notes on many types of interaction with students, teachers , and parents. This application, designed in cooperation with the building principals, provide a ``tickler'' type reminder for follow-up activities.

Student At Risk Data Base

A data base that helps track students that have been identified as potentially ``at-risk.'' This is a pilot of some of the data, grades 6-8, that we would like to track district-wide.

Mailing Labels/Form Letters

Computer Services regularly produces mailing labels, and form
letters from the student and family data bases. During the 1992- 93 school year many of these services were distributed to the buildings. This is part of a systematic approach that puts data in the hands of the end-user.

ADMINISTRATIVE, BUSINESS APPLICATIONS

RJE Printing of NYSSCSS Reports

Reports that are generated as part of the BOCES NYSSCSS computer applications (i.e. payroll, accounts payable, general ledger) are printed by the Owego Apalachin Computer Services.

NYSSCSS Business Applications

Payroll
Accounts Payable
General Ledger

Terminals and networked PC's are connected to the BOCES NYSSCSS services. These services originally included student applications including scheduling, census, mark reporting, and attendance. These student applications are now being done completely in-house.

Budget Preparation System

A relational data base system is used to prepare the district-wide budget. This system provides a multi-year computerized history of the district budget.

Profs/TNT Statewide Network

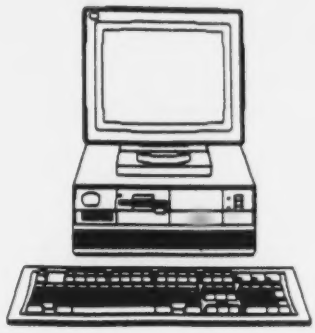
The statewide telecommunications network that connects our district to the Regional BOCES, State Education Department, and school districts across the state. Recently Owego Apalachin district began a pilot of a new software package (PXA SNA) that allows us to connect to the statewide network from within our existing office automation software.

CEO Office Automation Software

Word Processing
Electronic Mail
Calendar System
File Transfer Data Tables
2020 - Lotus like spreadsheet on our mini computer

Transportation - Bus Route System

A relational data base, connected to our central student information system which allows for the routing of our transportation system. The system creates bus lists, bus routes, and personalized form letters for parents.



Transportation/Maintenance Inventory System

This system will allows the tracking of work orders, parts inventory, fuels, productivity, and individual vehicle maintenance records. (Roger Creighton Associates software)

PLANS IN THE NEAR FUTURE

Further development of the integrated student information system

We intend to involve administrators, teachers, counselors, psychologists and school nurses in the design of a comprehensive student information system that will follow students through their K-12 career in the Owego Apalachin district. This system will tie directly to the central family and student data bases.

Connect to Fiber Optic Backbone

Pursue the connection of the Owego Apalachin district to a fiber optic backbone connecting our Distance Learning project and data telecommunications.

TRENDS AND CONCERNS IN COMPUTER SERVICES

GUIDING PRINCIPLES OF COMPUTER SERVICES

The selection of administrative software is based on the concept of Open Systems. The computer industry is changing very rapidly. It is very hard to know what computer, or even computer

operating system we will be using ten years from now. Even so it is critical that we know that our data will migrate easily across different platforms in the future. All the administrative software that we have purchased in past four years will run on multiple platforms, and can be accessed through the same data base structure.

Need to Know Security System: All of our administrative computing applications are password protected. The password system is designed to limit access to authorized users that have a need to know. We take seriously our moral obligation to protect the integrity and confidentiality of our data. With our data bases becoming more widely accessed, security takes on an increasing importance.

Distributed Computing: We believe that the locus of control of data belongs at the most local level. Although many of our applications are complicated and require the support of the Computer Services Department. We believe that the administrator, or building that needs information should have the ability to access that information easily. In the future we will be developing systems and providing inservice to help our users access information more effectively.

Instructional Support - As we see technology play a more important role in instruction the issues of inservice, software selection, technical support, and curriculum integration are becoming more and more important. If we are to move ahead toward our district's long range plan for technology we will need to provide additional support.

OFFLOADING OF COMPUTER APPLICATIONS

There is a clear trend in administrative computing in which networked PC's replaces diskless terminals. This trend tends to take pressure off the critically networked applications of the mini computer, while providing the user with access to specialized software. Resource intensive applications such as desktop publishing, and computer graphics can be run using the power of the microcomputer. At the same time the networked PC has access to the critical shared resources of the network including student application software, shared data bases, and networked printers. We expect to experience this trend within our district.

A Note to Parents

OWEGO APALACHIN CENTRAL SCHOOL DISTRICT

How much will your child learn about computers in the next few years? Our district is very concerned that the students become competent for a future that is likely to involve computers. Your child will go to college or to work in an age where computers are commonplace. They will have to use them to write papers, access library books, keep financial records, design buildings, and write poetry. Will they be ready? In this newsletter we hope to share with you some of our goals and expectations for Computer Education in the Owego Apalachin School District.

We are very proud of the fact that our district has put in place a comprehensive plan for Computer Education. This plan was the product of two years of labor by over a dozen teachers and administrators. The plan includes instruction in keyboarding, word processing, programming, computer applications, and electronic information retrieval for all of our children. It also offers elective courses for students that want to specialize in areas such as Business or Programming.

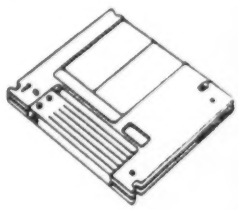
Our philosophy of Computer Education includes some very basic beliefs. First of all we believe that all of our students need to be competent in the use of computers. Our Computer Education Curriculum requires that all students receive instruction in the use of computers.

We also believe that the computer is a tool, not an object to study for its own sake. Like a dictionary or a pencil the computer should be used by students in their learning activities. It is a writing tool, a device that can help students learn mathematics, and even a means for creating music. We hope that as your children study courses like English, Science, or Social Studies that they will turn to the computer as a logical tool.

As a district we wanted to avoid creating a ''pull-out'' program for computer instruction. That is why we have designed and installed computer labs in each school building. The teacher can be there with the entire class.

We want to know what you think. Enclosed you will find a scope and sequence of computer instruction that the district offers. Please review them. If you have questions, or ideas for improvement, please let us know. You can address comments about the Computer Education Curriculum to:

Carl Muldner
Coordinator of Computer Services
Owego Apalachin Central Schools
36 Talcott St.
Owego, NY 13827



Computer Education Curriculum

Keyboarding Grade 3-4

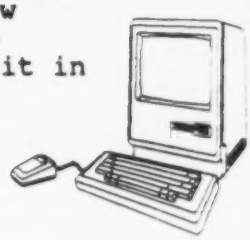
Students begin to learn proper Keyboarding technique in Third Grade. They learn to use the home keys and to type without looking at the keyboard. The students go to the compter lab with their teacher to practice these skills.

Word Processing Grade 4-6

Word Processing allows students to exercise more control over their writing. They learn to enter their own stories or text, make changes and corrections with the computer, and print copies for class and personal use. Our Word Processing Curriculum begins in Grade 4. We expect our students to master the basics by Sixth Grade.

Programming Grade 7

All of our Seventh Grade students are introduced to the basic concepts of Programming. The children learn to write and execute simple programs in the Basic language. More importantly they gain an insight into how computers work and a valuable introduction to skills of analysis and logic. The graphics unit in this Mini Course is very popular.



Computer Applications Grade 8

In the Eighth Grade students participate in a Mini Course in Computer Applications. The students learn to design and use a data base program to record, sort, and evaluate information. They also learn to use a spreadsheet to manipulate information on numbers, money, and budgets.

Telecommunications and Electronic Data Bases Grade 7-12

The ability to access Telecommunications and Electronic Data Bases is becoming an important skill for our students. Students (starting in Seventh Grade) learn how to use Boolean logic and search skills to find information in CD Rom and On- line Data Bases. The skills are taught as part of the Library program and are practiced within classes such as: Social Studies, Science, and English.

Electives 9-12

Programming

Many elective programs, available at the high school, involve the use of computers. We offer four levels of instruction in Programming: Basic I, Basic II, Pascal, and Advanced Placement Pascal. A number of our students have been able to gain college credit for their successful performance on the AP Pascal test.

Business

The computer is an important part of the Business Department curricula. Two new courses, Electronic Information Processing I and Electronic Information Processing II, allow students to master the Business use of computers including an introduction to Desktop Publishing.

Drafting

The Drafting program at the high school is making increasing use of computerized design and drawing. The mouse and the digitizer seem destined to replace the t-square.

Computer Education

Possible Long Term Goals

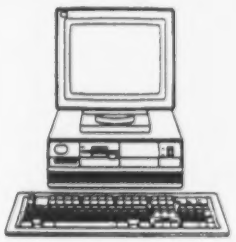
1. Immediate access to computers and instructional tools for all students and teachers.

2. Networked computers in every classroom (3-5 each).

3. Hands-on learning integrated within the curriculum; science probes, math exploration software, CAD, geography, and music interfaces.

4. Access in every classroom to research facilities of the library including: electonic encyclopedia, card catalog, Reader's Guide to Periodical Literature, etc..

5. Lending Library of software for students and teachers.



6. Tools for the home: portable computers for students, teachers, and administrators.

7. Open labs available to the community.

8. Electronic mail and file transfer services for all professional employees.

9. Ready access to critical student information. Every building administrator connected to instructional network.

10. On-line student testing with grades kept on the system.

11. Absolute integration of technology with the instructional curriculum. The computer serves the learning process as a tool.

12. Extensive use of emerging technologies including voice synthesis, laserdisc, scanners, and multi-media.

13. Access to the best state of the art software, and learning strategies.

14. Individualized instruction available in all classrooms. Core software in mathematics, reading, spelling, vocabulary, and writing provides remedial and enrichment activities within every classroom.

15. The integration of scanners, computers, word processors, and graphics programs allows students to create multi- media term papers and reports.

16. A publishing center in every school for the use of students and teachers.

Computer Education Plans

GOALS FOR THE FUTURE:

1. INTEGRATION OF COMPUTERS - into existing curriculum areas
2. LONG RANGE COMPUTER INSTRUCTION PLAN
3. PLAN FOR DISTRICT-WIDE COMPUTER NETWORK

Computer Education Plans

ASSUMPTIONS: For Next Long Term Plan

1. All students need to learn to use computers for their future

2. The computer is a tool not an educational subject. Students need to learn to use the computer to master other subjects. The computer will be integrated into the curriculum of almost all subjects.

3. Teachers and students need ready access to computers and the tools of instructional technology.

4. All classrooms be equipped with computers and connected to the districts computer network.

5. The role of computers and instructional technology will fundamentally change the way we provide instruction in the future.

6. We need to be ready to adapt to emerging technologies on an on-going basis.

ASSUMPTIONS: For Next Long Term Plan

I. All students need to learn to use computers for their role in the 21st century.

A. Students will need to process information as a basic skill.

B. Students need to be computer literate. They need to be able to use tools such as word processing, data bases, spreadsheets, desktop publishing, and telecommunications in their everyday studies.

C. Every student will use computers in their writing.

D. Students will be competent in search strategies needed for information retrieval in the electronic age.

E. Students will be writing multi-media compositions including text, sound, and graphics.

F. Students will use technology in the higher levels of the learning process for crea tive thinking, problem solving, rapid manipulation of data, the interpretation of data, and the presentation of information.

II. The computer is a tool not a separate educational subject. Students need to learn to use the computer to master other subjects. The computer will be integrated into the curriculum of almost all subjects.

Music -- MIDI technology, music composition software, use of videodisc to analyzed music

Industrial Arts -- Robotics, Computerized Milling, CAD

Social Studies -- Multi-media, research, computerized geography

Science -- Science labs using computer assisted data collection and analysis, Laserdisc simulations of dangerous experiments

III. Teachers and students need ready access to computers and the tools of instructional technology.

A. Classrooms, libraries, study halls, teacher offices, and other learning centers should be equipped with computers and printers as appropriate.

B. Portable computers and tool software should be available for the use of teachers, students, and administrators.

C. Adaptive computers and peripherals should be available to meet the needs of students with special needs.

D. Publishing Centers including computers, desktop publishing software, and letter quality printers will serve the students and teachers of each building.

E. Software for remediation and accelerated students will be available for the use of all students.

4. All classrooms be equipped with computers and connected to the districts computer network.

A. Each school building will have a computer network connecting each of its classes, and learning centers to a vast library of computer software.

B. The network will support an open architecture that allows us to incorporate differ ent and emerging computer systems.

C. Students and teachers will be able to access library and research resources from the classroom and the home.

D. Remedial software will be available in every classroom.

E. The network will extend to the district and state-wide level.

F. All teachers and administrators will have access to electronic mail and file transfer.

5. The role of computers and instructional technology will fundamentally change the way we provide instruction in the future.

A. Students will learn to research and process information electronically.

B. Emerging instructional technologies such as: laser disc, hyper-media, multi-media, and CD ROM will become common as tools for learning.

C. The use of computerized instruction will allow for a much greater degree of indi vidualized instruction.

D. Project oriented learning will encourage more cooperative learning. The computer will be a central part of this process.

E. The process of testing, grading, and mark reporting can be automated and inte grated. The computer will allow us to totally redefine the role of testing and the mas tery of instruction.

F. The how of learning will become more important than the what.

6. We need to be ready to adapt to emerging technologies on an on-going basis.

A. The district's network architecture will be designed so that it can accommodate emerging technologies such as multi-media and video transmission.

B. The district needs to make a significant commitment to the re-training of the professional staff in order to use the emerging instructional technologies.

C. Adequate staffing will be required to support the use of the emerging instructional technologies.

OWEGO APALACHIN CENTRAL SCHOOL DISTRICT

ACADEMIC DESIGN MODEL

INTRODUCTION

The Academic Design Model is planned to provide the Owego Apalachin Central School staff and community with a process for the review, development, and implementation of the curriculum and staff development activities. The Model, as illustrated on the cover, can be applied to areas of the curriculum ranging from single courses to entire programs of instruction and in all areas of staff development.

The curriculum development process has six areas of activity called "phases". Each phase covers an important aspect of curriculum development providing a series of specific steps to be followed. Together, these phases cover the entire range of tasks necessary to develop and to maintain curriculum. Staff development activities are an outgrowth of curriculum development activities.

The entire Model is predicated on the principle that delivery of appropriate and effective instruction depends upon the involvement of professional staff members, especially the teacher. Extreme care was taken to ensure that staff members who possess the appropriate background and training would be engaged in decision making at the critical points in the process. The overriding objective was to establish a process that ensured development and maintenance of a curriculum and staff development that would be judged by the teacher to be appropriate, applicable and useful.

The ADM's structure was carefully designed and arranged. Nevertheless, it will require continuous review and modification to remain useful. It is intended that the Model will be evaluated, updated, and modified on a regular basis.

ASSESSING THE ACADEMIC DESIGN MODEL

The Model is built on the concept of open access by the staff and community. Requests to review a particular curriculum, course or aspect of instruction are submitted to the Director of Education on the appropriate curriculum or staff development review request form. These forms are short and concise so that they can easily be completed. The Director of Education is charged with assisting persons who desire to refer a request to the Academic Design Model System.

Once the completed review request form has been received, they are referred to the appropriate steering committee for consideration and action. These steering committees are the operational aspect of the Model. They carefully consider all requests based on appropriateness to district goals and priorities available resources and personnel. All decisions made by the respective steering committees are reported to the staff and those persons submitting the request considered.

The Director of Education is charged with operationalizing the decisions and actions taken by the respective steering committees. He reports these results to the committees and the staff on a regular basis.

The district has a formal system for development of curriculum and staff development activities. All activities are outlined on a district proposal format that outlines all aspects of such activities. The training of personnel involved is also another key element. The Director of Education coordinates this aspect of the Model.

Lastly, as in the case for all activities, Board of Education approval is required prior to beginning and the Board either approves all final projects or receives a detailed report.

ACADEMIC DESIGN MODEL

PHASE DEFINITIONS

Curriculum Review:

The examination of any aspect of the instructional program, either in existence or proposed, to determine further action.

Needs Assessment:

The gathering of specific data on the current status of any aspect of the instructional program in order to develop recommendations concerning the future of the program.

Goals and Objectives:

The development of goals establishing the direction and intent of the program and objectives citing desired student outcomes with regard to knowledge, skills and attitudes.

Curriculum Design:

The selection of all necessary and appropriate components to produce a complete, operational program of instruction.

Implementation:

The activities which cause a program of instruction to be carried out as designed.

Summative Evaluation:

The assessment of the overall effectiveness of a program after it has been in operation for a predetermined length of time.

ACADEMIC DESIGN MODEL

STRUCTURE

The Academic Design Model has two functioning steering committees. These Curriculum and Staff Development committees consist of eight teachers, one building administrator and the Director of Education. The Director of Education is a non voting member of both steering committees. Each steering committee shall elect a chairperson who will develop the agenda in concert with the Director of Education. The chairs of the two steering committees shall meet jointly on a regular basis with the Director of Education.

In addition to the specific responsibilities assigned to the respective committees, they are charged with monitoring the rate of change in the district. The Director of Education will serve as an advocate for a reasonable rate of change.

The respective grade levels, and departments are responsible for suggesting priorities for curriculum and staff development based on their needs and long-term goals. To this end, minutes and other communications shall be distributed to the system-wide, grade level and department chairs for discussion at appropriate staff meetings.

MEMBERSHIP SELECTION

Each building will elect a nominating committee consisting of the principal and three teachers representing the various grade levels and subject area interests. This nominating committee will ask for volunteers and otherwise recruit potential members for the two steering committees. These nominating committees will be empowered to make judgements. Nominations for the steering committees may be added from the floor.

An election will be held by the respective faculties to fill the two representative spots on each committee. Annually, in preparation for their election, the Director of Education will send to each faculty member and administrator a job description including a list of expectations for those serving on these committees. Included in this description will be an anticipated time commitment.

The length of term for the representatives from each building, will be two years. The first year of the model, one-half of the representatives will serve a one year term.

/cg
1/3/90

ACADEMIC DESIGN MODEL

GOVERNANCE

MANAGEMENT SYSTEM

STAFF DEVELOPMENT STEERING COMMITTEE

The Staff Development Steering Committee has responsibility to assist in the design, development, implementation and monitoring of the ongoing inservice program for teachers in the district. Additionally, the Committee will coordinate efforts with the Teacher Center, implement a program for new teachers and provide input on student teacher and intern arrangements. The Committee will assist in the development of the process of recruitment and screening of prospective district teachers. Lastly, the Committee will assist in the implementation and recommend revisions on the Technical Assistance Programs that are designed to assist teachers in jeopardy for continued employment.

CURRICULUM DEVELOPMENT STEERING COMMITTEE

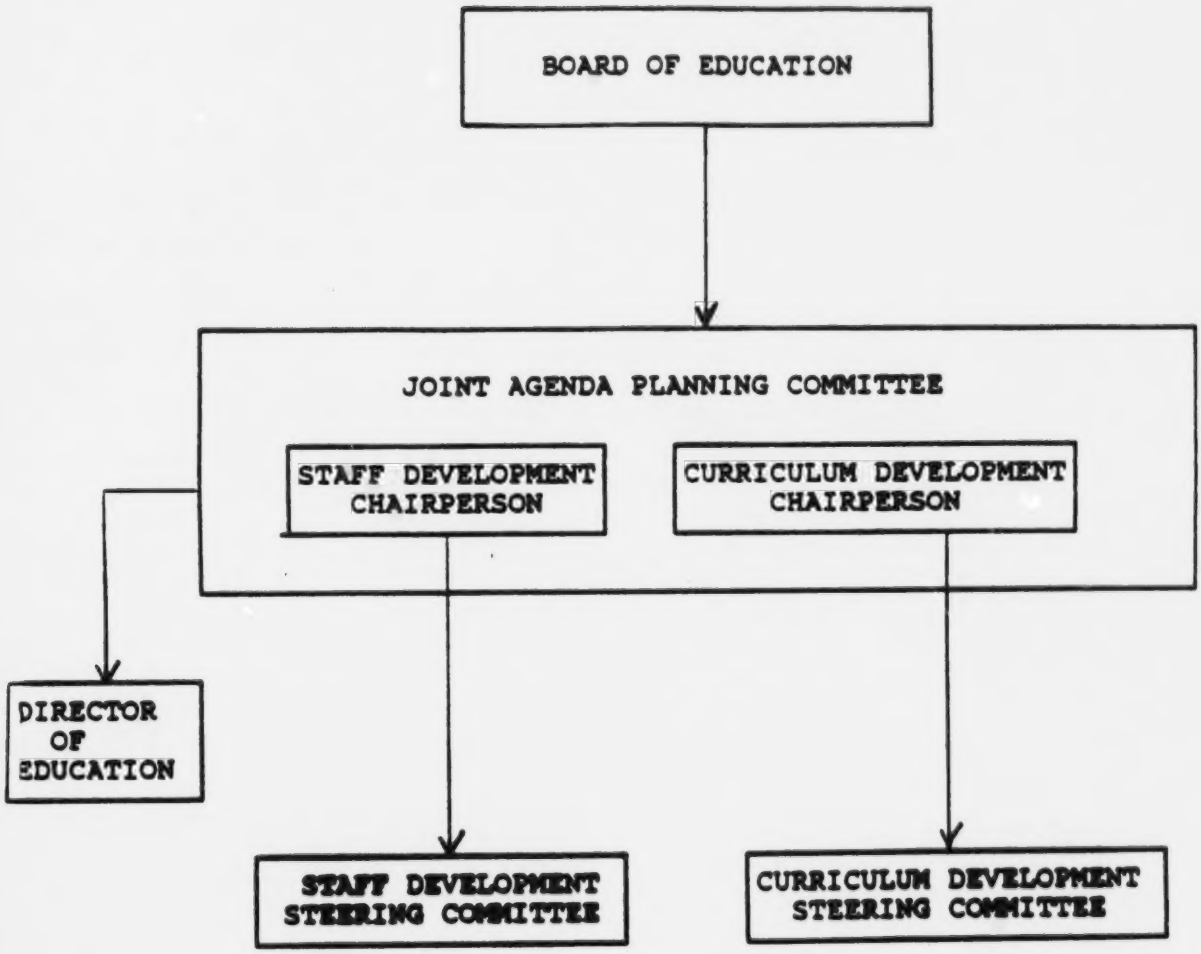
The Curriculum Development Steering Committee has responsibility to oversee new curriculum projects, advisement in the selection of personnel to conduct curriculum projects, and the evaluation of finished curricular products. The Committee is charged with accepting or rejecting initial curriculum requests referred by district staff and/or community representatives. Lastly, the Committee assists in the management of the Curriculum Development budget.

A copy of the Academic Design Model management system's organization follows.

OWEGO APALACHIN CENTRAL SCHOOL DISTRICT
OWEGO, NEW YORK

ACADEMIC DESIGN MODEL

MANAGEMENT SYSTEM



OWEGO ELEMENTARY SCHOOL:

SUMMARY OF COMPUTER RELATED BUILDING PROJECTS

1. Include computer lab in security system

2. Review classroom space needs in light of the installation of up to 5 computers per classroom.

3. As an integral part of any building project complete the following:

   a. Plan and install wiring cabinets as needed for planned network (see attachment).

   b. Install computer cabling (coaxial, or fiber) to each classroom. The cabling should be designed to accomodate networking of computers (using a token ring or ethernet topology) and also the eventual use of multi-media transmission.

   c. Purchase and install a file server to be used in the distributed network. The file server will be connected to each classroom and the distict-wide computer network.

   d. Minor room remodeling to accomodate the installation of computers in each classroom and instructional station.

   e. Upgrade the electrical circuits for the building and each instructional site.

SUMMARY OF COMPUTER RELATED BUILDING PROJECTS

OWEGO APALACHIN MIDDLE SCHOOL:

1. Include computer lab in security system

2. Review classroom space needs in light of the installation of up to 5 computers per classroom.

3. As an integral part of any building project complete the following:

   a. Plan and install wiring cabinets as needed for planned network (see attachment).

   b. Install computer cabling (coaxial, or fiber) to each classroom. The cabling should be designed to accomodate networking of computers (using a token ring or ethernet topology) and also the eventual use of multi-media transmission.

   c. Purchase and install a file server to be used in the distributed network. The file server will be connected to each classroom and the distict-wide computer network.

   d. Minor room remodeling to accomodate the installation of computers in each classroom and instructional station.

   e. Upgrade the electrical circuits for the building and each instructional site.

SUMMARY OF COMPUTER RELATED BUILDING PROJECTS

OWEGO FREE ACADEMY:

1. Include computer lab in security system

2. Review classroom space needs in light of the installation of up to 5 computers per classroom.

3. As an integral part of any building project complete the following:

   a. Plan and install wiring cabinets as needed for planned network (see attachment).

   b. Install computer cabling (coaxial, or fiber) to each classroom. The cabling should be designed to accomodate networking of computers (using a token ring or ethernet topology) and also the eventual use of multi-media transmission.

   c. Purchase and install a file server to be used in the distributed network. The file server will be connected to each classroom and the distict-wide computer network.

   d. Minor room remodeling to accomodate the installation of computers in each classroom and instructional station.

   e. Upgrade the electrical circuits for the building and each instructional site.

SUMMARY OF COMPUTER RELATED BUILDING PROJECTS

MAINTENANCE AND TRANSPORTATION SITE:

1. Long term plans include the connection of these two sites to the district's distributed network. An underground cable connection between the two buildings will allow this this to be done in a cost effective manner.

SUMMARY OF COMPUTER RELATED BUILDING PROJECTS

DISTRICT OFFICE

1. Install temperature, and water sensing security equipment.

2. Include in plans for security system.

3. Install adequate air conditioning.

OVERVIEW OF THE PLANNED DISTRIBUTED COMPUTER NETWORK

OWEGO APALACHIN CENTRAL SCHOOLS

1. Currently the district has an administrative computer network connecting every office and building. This network is based on a Data General Mini Computer.

2. In the future every classroom and instructional station will be connected to a building Local Area Network (LAN). This LAN will provide access to a vast software library for our students and teachers. Administrators and teachers will be able to access student information and the administrative network via a gateway to the Data General system.

3. Each classroom and instructional station will be equipped with multiple computer workstations, as well as printers, and other peripherals as required.

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